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| 60148 7590 03/06/2009     |             |                      |                      |                  |
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| EXAMINER                  |             |                      |                      |                  |
| MARCO'ANTONI, PAUL D      |             |                      |                      |                  |
| ART UNIT                  |             | PAPER NUMBER         |                      |                  |
| 1793                      |             |                      |                      |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/753,089

**Applicant(s)**

LUO ET AL.

**Examiner**

Paul Marcantoni

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4-9, 11 and 25-33 is/are pending in the application.
- 4a) Of the above claim(s) 25-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-9, 11 and 28-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1, 4-9, 11, and 25-33 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/22/09:10/21/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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Applicants arguments and Terminal Disclaimers filed 2/6/09 are respectfully acknowledged but have been found unpersuasive.

IDS2 Statements:

Applicants submitted two IDS statements dated 2/2/09 and 10/21/08. The examiner has not considered all references and has put a line thru those reference only because they do not contain a date. Please provide a date for each of these crossed out references so that they may be initialed for consideration in a new IDS with these references.

Terminal Disclaimers Improper:

The two terminal disclaimers both submitted on 2/6/09 have been disapproved. The attorney listed in each terminal disclaimer is not an attorney of record. This can easily and quickly be resolved by submitting a power of attorney for the attorney of record for both terminal disclaimers. Name all attorneys on this document and submit at your earliest convenience so that these terminal disclaimers may be approved. It is the position of the examiner that should applicants submit correct this to make the terminal disclaimers proper (submitting proper powers of attorney for missing attorneys of record) all prior art rejections would likely be withdrawn and allowance of claims resulting.

New Matter:

The rejection over 35 USC 112 first paragraph (new matter) regarding a narrower range than literally supported has been withdrawn. Applicants appear to argue the Wertheim decision stating they do not need *ipsis verbis* condition to satisfy 35 USC 112. The narrower range of about 12 to 17 wt% bleached

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cellulose fibers is within the broader originally disclosed range of about 5 to 25 wt%. The rejection has been thus withdrawn.

ODP Rejection:

Claims 1 and 4-11 and 28-33 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over all claims of U.S. Patent No. 6,606,248 B1 and 6,346,146 B1 (both Duselis). Although the conflicting claims are not identical, they are not patentably distinct from each other because both teach a cement composite comprising a mixture of bleached and unbleached cellulose fibers.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A *timely filed terminal disclaimer* in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

35 USC 102:

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Claims 1 and 4-9, 11, and 28-33 are rejected under 35 U.S.C. 102(a and e) as being anticipated by Duselis et al. '248 B1 or '146 B1.

Duselis et al. teach a composition comprising a combination or blend of bleached and unbleached cellulose fibers in amounts overlapping applicants' claims (see, for example, Duselis et al. 248 B1, col.5, lines 15-21). Duselis et al. thus anticipate applicants' claims.

35 USC 103 :

Claims 1 and 4-9, 11, and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duselis et al. ("248 B1 or '146 B1) alone or in view of Cook et al. '726 B2 and Gregerson et al. (EP 263723).

Duselis et al. teach a composition comprising a combination or blend of bleached and unbleached cellulose fibers in amounts overlapping applicants' claims (see, for example, Duselis et al. 248 B1, col.5, lines 15-21). Duselis do not necessarily teach all the types of cellulose fibers claimed by applicants for their invention. Cook et al. (hereafter Cook) teaches examples of cellulose fibers that can be used for cement fiber reinforcement includes radiata pine, spruce, redwood, and douglas fir (see col.3, lines 60-67). It would have been an obvious design choice for one of ordinary skill in the art to use a specific cellulose fiber in Duselis cement/cellulose fiber composition because they are known for that use in the art according to Cook.

Also, Gregerson et al. (hereafter Gregerson) teaches adding cellulose fiber such as bleached or unbleached cellulose fiber to hydraulic binder or cement. Gregerson et al. teach conventional cellulose fiber sizes for length are

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1.0 mm for bleached cellulose fibers and less than 4 mm for unbleached cellulose fibers (see p.6 under Fibres). This is thus a conventional size range for cellulose fibers and it would have been an obvious design choice for one of ordinary skill in the art to use this cellulose fiber size in cement. Note that this secondary Gregerson was necessary because Duselis did not explicitly teach what fiber sizes he uses for his invention. Nevertheless, it would have been obvious to one of ordinary skill in the art (according to Gregerson) to use conventionally known fiber sizes for cellulose fiber in the Duselis cement/cellulose fiber composition.

Response to Applicants Arguments of 2/6/07 (in 4/9/08 Non-Final

Rejection):

ODP

The examiner maintains the ODP rejection is proper and Duselis does not limit his range of amounts for his mixture. Duselis '248 B1 teaches cellulose fibers may be bleached, unbleached, or mixtures thereof. Again, Duselis is not limited to any particular ranges but is inclusive of any mixture between bleached fibers and unbleached fibers. This reference is good for all that it teaches and it is inclusive of applicants' claimed mixture.

The applicants argue Kaplan case law noting that the examiner's rejection over Duselis rejection falls under a "dominating" effect in accordance with his case law. The examiner disagrees. A reference is good for all that it teaches and Duselis is inclusive of any mixture of bleached and unbleached cellulose fibers. The applicants are essentially asking the examiner to ignore the teaching of this reference (mixtures of bleached and unbleached cellulose fibers) which is inclusive of mixtures and he can not and will not do so.

Duselis 102 and 103:

The applicants acknowledge that Duselis teaches a mixture or combination of bleached and unbleached fibers yet do not teach their specific range of amounts. In rebuttal, the examiner maintains that Duselis is not limited to particular ranges of amounts and teaches any mixtures of bleached and unbleached fibers including from zero to 100 wt% for each cellulose fiber (bleached or unbleached) component under "and mixtures thereof" as taught by Duselis.

Response to Applicants Arguments of 7/9/07 (in 8/30/07 Final Rejection):

The applicants repeat arguments previously presented and the examiner has pasted the same response as noted above for further review and response to these reiterations.

The applicants also argue that the benefits of bleached and unbleached fibers were not recognized at the time of filing of their ODP references. This is not relevant especially since these ODP references sufficiently teach applicants' invention and the prima facie case of obviousness has been met. Applicants also argue that bleached fibers are not required. The point is not relevant since the references teaches it can be used and thus applicants cannot ignore the totality of the teaching of the reference.

The Duselis et al. '248 B1 reference teaches the cellulose fibers may be bleached, unbleached, partially bleached or mixtures thereof. (col.5, lines 16-17). The examiner maintains that Duselis is not limited to particular ranges of amounts and teaches any mixtures of bleached and unbleached fibers including from zero to 100 wt% for each cellulose fiber (bleached or unbleached) component under "and mixtures thereof" as taught by Duselis. This is and remains the examiner's position regarding the prior art meaning of "or mixtures thereof" as being for each component (bleached fiber and unbleached fiber) both being in the range of 0 to 100 wt%.

The applicants next argue *dry formulation* versus they allege in their own invention is total cellulose fibers. A review of applicants' claim 1 also reveals that it is a dry formulation as there is no *water* in claim 1. Applicants' own total amounts of bleached and unbleached cellulose fibers is directed to their own dry formulation so this argument is not convincing.

Response to Applicants' Arguments from 10/31/07 RCE:

Many of the applicants' arguments repeat earlier arguments. The response to them thus can be found above in the examiner's previous responses. The applicants have now added a new limitation to claim 1 that the MOR of their claimed cement composite of between about 5-25 wt% bleached and remainder unbleached cellulose fibers has a modulus of rupture "substantially equal to or greater than the MOR of an equivalent composite material reinforced with unbleached premium grade cellulose fibers. In rebuttal, as stated numerous times before, the Duselis patents teach a composite comprising a mixture of bleached and unbleached fibers. Duselis has been given the broadest interpretation from their disclosure and both the examiner takes that Duselis does not limit his amount or mixture of bleached and unbleached fibers. They can each be in any amount from 0 to 100 wt%. Thus, they would overlap applicants amounts and the same overlapping composition would have been expected to have the same properties such as modulus of rupture.

The examiner, contrary to applicants' comments, does not *take issue* with the benefits of bleached and unbleached fibers and never said so. He simply maintains that his interpretation of Duselis is this prior art teaches an overlapping

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cement cellulose fiber composite. He does not limit the amounts of unbleached and bleached cellulose fibers and thus can be any amount each from 0 to 100 wt% of cement composite. Thus, the amounts of the prior art and applicants' claimed composite overlap giving the same properties.

131 Declaration-Mr. Caidan Luo:

The applicants' submitted 131 provides no experimental evidence or data but only the *opinion* of the instant inventor who is an expert in this field and who is not a neutral observer in the outcome of the instant prosecution. The mechanical properties and *benefits* Mr. Luo alleges to be unexpected are not unexpected since Duselis teaches their cement composite containing bleached and unbleached cellulose fibers in overlapping amounts. Applicants disagree but this has been the point of contention from the beginning of prosecution. The examiner maintains that the references overlap for the reasons stated above and numerous other times in his responses to applicants. The Duselis references teach a mixture of bleached and unbleached cellulose fibers in a cement composite and do not limit their mixture of cellulose fibers to any amount.

The applicants argue that address Duselis does not address the same solution (or intended use). In rebuttal, the prior art does not have to do so. The new use of a known composition is not a patentable distinction.

The applicants argue the secondary references as primary references and do not address the combination rejection which is improper. The applicants are twisting the examiner's position to obfuscate the record and not addressing the proper combination of references in his rejection. Please refer back to the motivations as to why he combines the secondary references. He does not rely on the secondary reference as a primary reference. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The applicants have asked for further clarification regarding his position. In rebuttal, he respectfully refuses such a request. He has made his position very clear throughout prosecution that he has interpreted Duselis as not limiting his amounts of components of bleached and unbleached cellulose fibers. Applicants always have recourse to appeal and agreement between examiner and applicants is not mandatory. Applicants have not yet exercised their option of immediately moving to the Board of Appeals and not filing any further continuations if they are certain that his position is in error. They have yet to do so. The examiner's position has not changed from the beginning and is unchanged in light of further argumentation. He maintains it is proper for the reasons above and in previous office actions.



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Response to Arguments filed with 7/15/08 RCE:

Again, applicants arguments repeat earlier arguments and the examiner maintains that Duselis still teaches an overlapping range of amounts of bleached and unbleached fibers that meets the limitations of applicants' claims. The fact that applicants narrowed their range did not really change the examiner's position but created new problems (of new matter regarding literal support). The examiner maintains that he cannot ignore the teaching of Duselis even if broad in that he teaches a mixture of bleached and unbleached fibers in cement. A references is good for all that it realistically teaches.

Most Recent Response to Arguments from 2/6/09 Response:

The new matter rejection has been withdrawn. The ODP rejections remain because applicants terminal disclaimers are unacceptable and have been disapproved for the reasons stated above. It would appear that sworn declarations (under 35 USC 132 or 131?) are also needed to overcome the prior art rejection with respect to the Duselis patents under 35 USC 102 and 103. It would not appear that the terminal disclaimers are enough to overcome these rejections as the inventorships for the instant invention and the prior art Duselis patents are not exactly the same. The applicants appear to narrow their range for bleached fibers to overcome the examiner's rejection. However, the rejection despite this change still accounts for even the narrower range. Applicants make no new arguments in this regard and are referred to examiner's previous rebuttal arguments which address applicants' instant arguments.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

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the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Marcantoni whose telephone number is 571-272-1373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Paul Marcantoni/  
Primary Examiner, Art Unit 1793